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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/493,686	01/28/2000	Carl Pinsky	9029-6MIS:jb	2539

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Sim & McBurney  
6th Floor 330 University Avenue  
Toronto, ON M5G1R7  
CANADA

EXAMINER
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STRECKER, GERARD R

ART UNIT	PAPER NUMBER
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2862

DATE MAILED: 12/12/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/493686Applicant(s)  
PINSKY ET ALExaminer  
G. R. STRECKERGroup Art Unit  
2862

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- ☐ Responsive to communication(s) filed on \_\_\_\_\_
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-31 is/are pending in the application.
- Of the above claim(s) 1-11 and 16-31 is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 12-15 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some\* ☒ None of the:
- ☒ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
- ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper N (s). \_\_\_\_\_
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

Art Unit: 2862

Applicant's election without traverse of the invention of Group II (claims 12-15) in Paper No. 5 is acknowledged.

Claims 1-11 and 16-31 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b) as being drawn to a non-elected invention. Election was made **without** traverse in Paper No. 5.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

In the specification, at page 1, the status of applicant's parent application should be updated. At page 12, line 3, it is not clear what is meant by the flat "blade" of the probe (see also line 8).

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claims 12-15 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Apparatus for carrying out the recited method of detecting a chemical substance is described at pages 11-20 with respect to figs. 1a and 1b. Such apparatus includes, as shown in fig. 1a, a Hall effect or SQUID magnetometer probe a control box and a chart recorder, and may

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also include waveguide directors and repeaters as shown in Fig. 1b. It is not clear from this description specifically what complete combination of elements detects fluctuations in "spontaneous intra atomic electron and nuclear quantum states" of the substance, how such fluctuations are represented, and how it is known that the responses from the magnetometer probe are indicative of fluctuations in spontaneous interatomic electron and nuclear quantum states of the substance.

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 12-15 are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility. It is not seen that the Hall effect or SQUID magnetometer probe arrangements disclosed are capable of identifying a chemical substance by detecting fluctuations in "spontaneous intra atomic electron and nuclear quantum states" of the chemical substance. The magnetometer probe arrangements would be incapable of discerning that any response to magnetic fields obtained by the magnetometer probes are due to or attributable to fluctuations in spontaneous intra atomic electron and nuclear quantum states of a chemical substance rather than some other magnetic energy phenomena. Sources of magnetic fields are ubiquitous and whether such magnetic fields detected by the disclosed magnetometer probe are produced as a result of spontaneous intra atomic electron and nuclear quantum states would be indeterminable or problematical.

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Claims 12-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 12 it is not clear how and where the detection of fluctuations in spontaneous intra atomic electron and nuclear quantum states is carried out in relation to the chemical substance and in what manner the fluctuations are manifest. Further, it is not clear what "a chemical substance" encompasses.

The Prior Art cited in Applicants parent application is made of record, however, copies of the prior art documents will not be provided since applicant has copies of these documents.

McGillem et al is made of record to show a microwave radiometer for classifying materials.

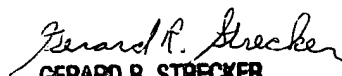
Uffelman is made of record to show a microwave system for detecting chemical vapors.

Potter et al is made of record to show the use of magnetic measurements for determination of chemical contamination.

Any inquiry concerning this communication should be directed to G. R. Strecker at telephone number (703) 305-4937.

Strecker/ds

12/10/01

  
GERARD R. STRECKER  
PRIMARY EXAMINER